Goal 4: Preventing Pollution and Reducing Risk in Communities, Homes, Workplaces and Ecosystems

Pollution prevention and risk management strategies aimed at eliminating, reducing, or minimizing emissions and contamination will result in cleaner and safer environments in which all Americans can reside, work and enjoy life. EPA will safeguard ecosystems and promote the health of natural communities that are integral to the quality of life in this nation.

Background and Context

The underlying principle of the activities in this goal is the application of pollution prevention. Preventing pollution before it may harm the environment or public is cheaper and smarter than costly cleanup and remediation. EPA uses a number of approaches to protect public health and the nation's ecosystems from the risks of exposure to pesticides and/or toxic chemicals.

While EPA continues to implement "the reasonable certainty of no harm" standard mandated by the FQPA in its regulatory decisions, it also works with pesticide users on adopting less toxic methods of pest management that reduce or eliminate toxic pesticides entering indoor and outdoor environments.

Regarding industrial emissions of toxic chemicals, in 1999 Toxics Release Inventory (TRI) facilities reported a total of 10.2 billion pounds of pollutants released, treated or combusted for energy. Reducing waste, and reducing the toxic chemicals that are used in industrial processing, protects the environment and also improves efficiency, thereby lowering costs for industry.

Pollution prevention involves changing the behavior of those that generate the pollution and fostering the wider use of preventive practices as a means to achieve cost effective, sustainable results. For example, the Design for the Environment and Green Chemistry programs strive to change the behavior of chemists and engineers to incorporate pollution prevention and environmental risk considerations in their daily work. The Strategic Agricultural Partnership Initiative and the Pesticide Environmental Stewardship Program cooperate with USDA, states, and non-governmental organizations to demonstrate with farmers integrated pest management strategies that reduce pesticide residues in the environment.

In Goal 4, the Agency targets certain chemicals of high risk as well as the full range of pollutants addressed by the pollution prevention program. Many chemicals are particularly toxic to children. For instance, at high levels, lead damages the brain and nervous system and can result in behavioral and learning problems in children. Despite a dramatic reduction in lead exposure among young children over the last twenty years, there were still approximately 900,000 children in the U.S. with elevated blood lead levels in the early 1990's. Evidence from recent State surveys suggests that EPA and other government programs made important progress in the mid- to late 1990's in further combating lead poisoning in children under the age of 6 years (though updated national estimates are still in development). On other fronts, exposure to asbestos, polychlorinated biphenyls (PCBs) and some pesticides in our buildings and in the environment poses risks to humans as well as wildlife. Pesticides and chemicals that may act as endocrine disruptors at ambient levels is an area of increased concern for human health and the environment. For other common chemicals, risks may not be known. The screening and testing of chemicals about to enter the market, combined with the review of the most common chemicals already in use through the Chemical Right-to-Know Program, fills critical gaps in our knowledge about the effects of chemicals on human health and the environment.

Means and Strategy

The diversity and sensitivity of America's environments (communities, homes, workplaces and ecosystems) requires EPA to adopt a multi-faceted approach to protecting the public from the threats posed by pesticides, toxic chemicals and other pollutants. The underlying principle of the activities in this goal is the application of pollution prevention practices, which can be cheaper and smarter than cleanup and remediation, as evidenced by the high cost of Superfund, Resource Conservation and Recovery Act (RCRA), and Polychlorinated Biphenyls (PCB) cleanups. Pollution Prevention (P2) involves changing the behavior of those that cause the pollution and fostering the wider use of preventive practices as a means to achieve effective, sustainable results.

Under this Goal, EPA ensures that pesticides and their application methods do not present unreasonable risks to human health, the environment, and ecosystems. In addition to the array of risk-management measures specified in the registration authorities under the Federal Insecticide, Fungicide, and Rodentcide Act (FIFRA) for individual pesticide ingredients, EPA has specific programs to foster worker and pesticide-user safety, ground-water protection, and the safe use of pesticides and other pest control methods. These programs work to ensure the comprehensive protection of the environment and wildlife, endangered species in particular, and to reduce the contribution of pesticides to ecological threats such as pollutant loading in select geographic areas. EPA is also addressing emerging threats such as endocrine disruptors by developing and implementing new screening technologies to assess a chemical's impact on hormonal activity.

Within the pesticide program, EPA pursues a variety of field activities at the regional, state, Tribal and local levels, including the promotion of pesticide environmental stewardship and Integrated Pest Management (IPM). States and Tribes are vital partners in our work to implement FQPA. Newer lab equipment will assist states enforcement of new FQPA standards. The voluntary partnerships and outreach programs that help farmers transition away from the riskier products are often catalyzed by state participation. These programs, combined with the availability of newer and safer pesticides, are having a real impact. In 2003 we expect at least 6 percent of acre-treatments will use applications of reduced-risk pesticides. We are seeing a reduction in wildlife impacts from pesticides as well, and in 2003 we project an additional 10 percent reduction in reported incidents of wildlife mortalities, from the 1995 level (for a cumulative 20 percent). That means fewer bird casualties, and fewer fish kills. The accumulation of these improvements will mean safer food, improved biodiversity, and a cleaner environment.

The Agency remains committed to safeguarding our Nation's communities, homes, workplaces and ecosystems. Preventing pollution through regulatory, voluntary, and partnership actions -- educating and changing the behavior of the public -- is a sensible and effective approach to sustainable development while protecting our nation's health. Two groups with significant potential to effect environmental change are industry and academia. The Agency has successfully pursued a number of pollution prevention programs with both of the these groups. Likewise, improved understanding of the potential risks to health from airborne toxic chemicals present indoors will strengthen our ability to reduce residents' exposure through voluntary changes in behavior and through potential product reformulation.

Preventing pollution through partnerships is also central to EPA's Chemical Right-to-Know Program (ChemRTK) which has already started providing the public with information on the basic health and environmental effects of the 2,800 highest production volume (HPV) chemicals in the United States (chemicals manufactured in or imported into the U.S. in quantities of at least 1 million pounds). Most residents come into daily contact with many of these chemicals, yet relatively little is known about their potential impacts. Getting basic hazard testing information on large volume chemicals is the focus of the "HPV Challenge Program," a voluntary program challenging industry to develop chemical hazard data that are critical to enable EPA, State, Tribes, and the public to screen chemicals already in commerce for any risks they may be posing.

Children's health remains a strong focus of the indoor environments program. Efforts in FY 2003 will target reductions in the presence of indoor triggers of

asthma, such as environmental tobacco smoke and biological contaminants, by continuing to educate the public about the disease and about the steps they can take to reduce the severity and frequency of asthma attacks. Voluntary work will be undertaken by schools to empower their students to manage their asthma symptoms better, by school personnel to improve the indoor environments of their schools, and by health care personnel to incorporate education about managing environmental asthma triggers into asthma treatment plans for their patients. EPA will continue to work toward bottom line results to reduce risk and improve indoor air quality through implementation of the Indoor Air Quality (IAQ) "Tools for Schools" kit and schools-based asthma education programs such as the "Open Airways" program in elementary schools. EPA will also continue work in the radon area primarily through the State Indoor Radon Grant Program where EPA provides assistance to the states for the development and implementation of programs to assess and mitigate radon to enhance the effectiveness of state and local activities for radon risk management and reduction.

Also central to the Agency's work under this goal in FY 2003 will be continued attention to reducing potential risk from persistent, bioaccumulative and highly toxic chemicals (PBTs) and from chemicals that have endocrine disruption effects. PBT chemicals are of particular concern not only because they are toxic but also because they may remain in the environment for a long period of time, are not readily destroyed, and may build up or accumulate to high concentrations in plant or animal tissue. In cases involving mercury and PCBs, they may accumulate in human tissue. EPA is also taking the initial steps to address the potential threat of endocrine disrupting chemicals on the health of humans and wildlife. Work focuses on developing and validating new chemical screens and tests to isolate those chemicals and characterize the threat.

EPA programs under this Goal have many indirect effects that significantly augment the stream of benefits they provide. For example, each year the Toxic Substances Control Act (TSCA) New Chemicals program reviews and manages the potential risks from approximately 1,800 new chemicals and 40 products of biotechnology that enter the marketplace. This new chemical review process not only protects the public from the possible immediate threats of harmful chemicals, like PCBs, from entering the marketplace, but it has also contributed to changing the behavior of the chemical industry, making industry more aware and responsible for the impact these chemicals have on human health and the environment. This awareness has led industry to produce safer "greener" alternative chemicals and pesticides. Under the Pollution Prevention Framework, the Agency recently started providing industry training in the use of the same tools that EPA uses to assess new chemicals, enabling companies to make smarter choices at earlier stages in their design process, reducing government costs, and hastening the entry of safer new products into the marketplace.

The Design for the Environment (DfE), Green Chemistry Program and Green Engineering (GE) build on and expand new chemistry efforts. They target industry and academia to maximize pollution prevention. Our DfE Program forms partnerships with industry to find sensible solutions to prevent pollution. In one example, taking a sector approach, EPA has worked with the electronics industry to reduce the use of formaldehyde and other toxic chemicals in the manufacture of printed wiring boards. Our Green Chemistry Program also forms partnerships with industry and the scientific community to find economically viable technical solutions to prevent pollution. In addition, the Green Engineering Program works with the American Society of Engineering Education (ASEE) to incorporate GE approaches into engineering curricula.

In several cases, achieving the strategic objectives under this goal is a shared responsibility with other federal, state and Tribal partners. For example, EPA's role in reducing the levels of childrens lead exposure involves promotion of federal-state-Tribe partnerships to decrease the number of specific sources of lead to children, primarily from addressing lead-based paint hazards. These partnerships emphasize development of a professional infrastructure to identify, manage and abate lead-based paint hazards, as well as public education and empowerment strategies, which fit into companion Federal efforts with Department of Health and Human Services (HHS), Department of Defense (DOD), Department of Energy (DOE), Department of Justice (DOJ), Centers for Disease Control (CDC), and Department of Housing and Urban Development (HUD). These combined efforts help to

monitor lead levels in the environment, with the intent of virtually eliminating lead poisoning in children.

Intrinsic to the effort to prevent pollution is the minimization of the quantities of waste generated by the public, industry, government agencies, and hazardous-waste management operations. Strategies range from fostering materials reuse and recycling and other resource-recovery processes to broad-based campaigns to re-engineer the consumption and use of raw materials or personal conservation of resources. Effective and sustainable programs reduce the need for storage, treatment or disposal of hazardous or municipal wastes, while reducing costs to industry and municipalities.

In FY 2003, EPA's waste management program will increase consumer and individual awareness of environmental issues by focusing on an environmental retail theme. This will emphasize a retail outreach approach targeted at consumers and households. EPA's environmental retail theme promotes better environmental decision-making, greater interest in the environment, and environmental stewardship on the manufacturing level.

Since this Goal focuses on how the public lives in communities, it features the Agency's commitment of fulfilling its responsibility for assuring human health and promoting environmental protection in Indian Country. EPA's policy is to work with Tribes on a government-to-government basis that affirms the vital trust responsibility that EPA has with 572 Tribal governments and remain cognizant of the Nation's interest in conserving the cultural uses of natural resources.

Research

Currently, there are significant gaps with regard to the understanding of actual human and ecological exposures to pesticides and toxic substances. To address those data gaps, this research will provide a strategic framework for developing an integrated suite of tools and models that will enhance EPA's procedures for assessing the risks to human health and ecological systems associated with commercial chemicals, microorganisms, and genetically modified organisms.

External Factors

The ability of the Agency to achieve its strategic goals and objectives depends on several factors over which the Agency has only partial control or influence. EPA relies heavily on partnerships with States, Tribes, local governments, the public and regulated parties to protect the environment and human health. In addition, EPA assures the safe use of pesticides in coordination with the USDA and FDA, who have responsibility to monitor and control residues and other environmental exposures, as necessary. EPA also works with these agencies to coordinate with other countries and international organizations with which the United States shares environmental goals. This plan discusses the mechanisms and programs that the Agency employs to assure that our partners in environmental protection will have the capacity to conduct the activities needed to achieve the objectives. However, as noted, EPA often has limited control over these entities. In addition, much of the success of EPA programs depends on the voluntary cooperation of the private sector and the general public.

Other factors that could delay or prevent the Agency's achievement of some objectives include: lawsuits that delay or stop EPA's and/or State partners' planned activities; new or amended legislation; and new commitments within the Administration. Economic growth and changes in producer and consumer behavior, such as shifts in energy prices or automobile use, could have an influence on the Agency's ability to achieve several of the objectives within the time frame specified.

Large-scale accidental releases or rare catastrophic natural events could, in the short term, impact EPA's ability to achieve the objectives. In the longer term, new environmental technology, unanticipated complexity or magnitude of environmental problems, or newly identified environmental problems and priorities could affect the timeframe for achieving many of the goals and objectives. In particular, pesticide use is affected by unanticipated outbreaks of pest infestations and/or disease factors, which require EPA to review emergency uses to ensure no unreasonable risks to the environment will result. EPA has no control over requests for various registration actions which include

among others new products, amendments, and uses, so its projection of regulatory workload is subject to change.

To achieve our collective goal of healthy indoor environments, EPA collaborates with Federal, state and local government agencies, industry, and non-profit organizations to conduct non-regulatory public outreach and education, provide incentives, and encourage voluntary actions. These are the primary methods EPA uses to influence individuals (e.g., homeowners, school administrators, parents, building owners) to take action to reduce their health risk. A key external factor which may impact the successful attainment of the indoor environments goal is the ability of states to leverage resources to achieve adequate results in the absence of funds devoted specifically to indoor air quality. In many cases, resources are limited and compete with Federally mandated regulatory programs (Environmental Law Institute Research Report on State and Local Indoor Air Quality Programs, November, 1997.)

The Agency's ability to achieve its objective of facilitating prevention, reduction and recycling of PBTs and toxic chemicals could be impacted by the increased flexibility provided to redirect resources under the National Environmental Performance Partnership System (NEPPS). If states redirect resources away from this area, it would impact both annual performance and progress implementing the Agency's strategic plan. To mitigate this potential issue, EPA is working with the Environmental Council of States (ECOS) to develop core measures and coordinating with states to reduce Persistent, Bioaccumulative, and Toxics (PBT) in hazardous waste and develop tools that will focus state activities on shared EPA and state goals.

In addition, recycling rates in the U.S. are affected by shifts in market prices for virgin materials and potential regulatory changes to reduce or eliminate disincentives to safe recycling. While market forces have helped to achieve current rates, better markets for recycled products/recyclables/reusables are needed to encourage increased recycling rates and source reduction. EPA has worked with other agencies to develop the Federal government's "buy recycled" program and the Federal Environmental Executive to promote this program and currently has several other ongoing projects to enhance markets for recycled materials.

Achieving our objective for Indian country is based upon a partnership with Indian Tribal governments, many of which face severe poverty, employment, housing and education issues. Because Tribal Leader and environmental director support will be critical in achieving this objective, the Agency is working with Tribes to ensure that they understand the importance of having good information on environmental conditions in Indian country and sound environmental capabilities. In addition, EPA also works with other Federal Agencies, the Department of Interior (US Geological Survey, Bureau of Indian Affairs, and Bureau of Reclamation), the National Oceanic and Atmospheric Administration, the Indian Health Service and the Corps of Engineers to help build programs on Tribal lands. Changing priorities in these agencies could impact their ability to work with EPA in establishing and implementing strategies, regulations, guidance, programs and projects that affect Indian Tribes.

Resource Summary

(Dollars in Thousands)

	FY 2001 Actuals	FY 2002 Enacted	FY 2003 Request
Preventing Pollution and Reducing Risk in Communities, Homes, Workplaces and Ecosystems	**$305,072.6**	**$319,915.1**	**$326,651.9**
Reduce Public and Ecosystem Risk from Pesticides	**$54,262.3**	**$56,026.3**	**$55,409.8**
Environmental Program & Management	$40,250.6	$42,020.1	$41,358.0
Science & Technology	$830.7	$920.7	$966.3
State and Tribal Assistance Grants	$13,181.0	$13,085.5	$13,085.5
Reduce Risks from Lead and Other Toxic Chemicals	**$33,927.9**	**$36,423.5**	**$36,355.9**
Environmental Program & Management	$20,130.6	$22,741.5	$22,673.9
State and Tribal Assistance Grants	$13,797.3	$13,682.0	$13,682.0
Manage New Chemical Introduction and Screen Existing Chemicals for Risk	**$69,315.0**	**$75,337.8**	**$77,538.2**
CREDIT SUBSIDY RE- ESTIMATE	$3,580.0	$0.0	$0.0
Environmental Program & Management	$45,428.6	$53,190.7	$52,388.6
Science & Technology	$20,306.4	$22,147.1	$25,149.6
Ensure Healthier Indoor Air.	**$39,190.4**	**$39,670.1**	**$40,322.7**
Environmental Program & Management	$27,363.8	$29,843.4	$30,455.1
Science & Technology	$3,810.4	$1,686.8	$1,727.7
State and Tribal Assistance Grants	$8,016.2	$8,139.9	$8,139.9
Facilitate Prevention, Reduction and Recycling of PBTs and Toxic Chemicals	**$41,723.8**	**$48,755.4**	**$46,115.9**
Environmental Program & Management	$32,405.1	$38,761.5	$36,122.0
State and Tribal Assistance Grants	$9,318.7	$9,993.9	$9,993.9
Assess Conditions in Indian Country	**$66,653.2**	**$65,436.6**	**$70,909.4**
Environmental Program & Management	$11,372.3	$12,966.9	$13,439.7
State and Tribal Assistance Grants	$55,280.9	$52,469.7	$57,469.7
Total Workyears	**1,131.2**	**1,204.9**	**1,193.9**

Objective 1: Reduce Public and Ecosystem Risk from Pesticides

By 2005, public and ecosystem risk from pesticides will be reduced through migration to lower-risk pesticides and pesticide management practices, improving education of the public and at risk workers, and forming "pesticide environmental partnerships" with pesticide user groups.

Key Program

(Dollars in Thousands)

	FY 2001 Enacted	FY 2002 Enacted	FY 2003 Request	FY 2003 Req. v. FY 2002 Ena.
Administrative Services	$222.1	$0.0	$0.0	$0.0
Congressionally Mandated Projects	$598.6	$1,700.0	$0.0	($1,700.0)
Endocrine Disruptor Screening Program	$757.5	$750.5	$768.9	$18.4
Facilities Infrastructure and Operations	$0.0	$3,350.0	$3,423.3	$73.3
Homeland Security	$0.0	$482.4	$0.0	($482.4)
Legal Services	$261.9	$308.2	$328.6	$20.4
Management Services and Stewardship	$351.8	$382.5	$384.1	$1.6
Partnerships to Reduce High Risk Pesticide Use	$11,851.9	$10,407.0	$12,279.8	$1,872.8
Pesticide Registration	$12,072.3	$10,609.7	$11,016.6	$406.9
Pesticide Reregistration	$2,767.0	$3,793.3	$3,907.2	$113.9
Pesticides Program Implementation Grant	$13,085.5	$13,085.5	$13,085.5	$0.0
Regional Management	$18.2	$0.0	$21.9	$21.9
Safe Pesticide Applications	$10,135.4	$11,157.2	$10,193.9	($963.3)

Annual Performance Goals and Measures

Agriculture Partnership

In 2003 Focus partnership development that indicates a successful transition on minor use commodity groups which use high risk pesticides (organoposphates, carbamates and B2 carcinogens).

In 2003 With USDA, universities, state lead agencies, and other stakeholders, promote the research and adoption of reduced risk pest management strategies (pilot APG).

In 2002 Implementation of 10-15 model agricultural partnership projects that demonstrate and facilitate the adoption of farm management decisions and practices that provide growers with a "reasonable transition" away from the highest risk pesticides.

In 2001 EPA began implementation of 12 model agricultural pilot projects.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Model agricultural partnership pilot projects	12	10-15 Addit.		Pilots
Successful transitions from high risk pesticides to effective alternative pest management practices			20-30	Transitions
Collaboration/outreach efforts			40	Efforts

Baseline: Under development

Pesticides in Groundwater

In 2003 Pesticides with high leaching and persistence potential managed to protect groundwater resources from contamination.

In 2002 Pesticides with high leaching and persistence potential will be managed through significant actions to protect groundwater resources from contamination.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Pesticides with high leaching and persistence potential managed to protect groundwater		22	25	Pest. (Cum)

Baseline: Thirty-one pesticides have been identified as of March 2000. Baseline revised in FY02 to administrative measure that tracks regulatory decisions that reduce impact of high leaching and persistent pesticides on the environment because of concerns about NAWQA data; i.e., it may not be replicating survey due to funding and survey design which may use different survey sites from year to year. New PM targets will be established in FY02.

Reduce Risk to Endangered Species

In 2003 None of the top 15 species on the Office of Pesticide Programs/Fish and Wildlife Service/ U.S. Department of Agriculture (OPP/FWS/USDA) priority list of threatened or endangered species will be jeopardized by exposure to pesticides.

In 2002 None of the top 15 species on the Office of Pesticide Programs/Fish and Wildlife Service/ U.S. Department of Agriculture (OPP/FWS/USDA) priority list of threatened or endangered species will be jeopardized by exposure to pesticides.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Species on priority list jeopardized		0	0	Species

Baseline: Top 15 species on OPP/FWS/USDA list for the year.

Reduce Wildlife Incidents and Mortalities

In 2003 Reduce by 20 percent from 1995 levels the number of incidents involving mortalities to terrestrial and aquatic wildlife caused by pesticides.

In 2002 Reduce by 10 percent from 1995 levels the number of incidents and amount of mortalities to terrestrial and aquatic wildlife caused by the 15 pesticides currently responsible for the greatest mortality to such wildlife.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Reported incidents involving mortalities to birds and fish		10%	20%	Reduction

Baseline: 80 reported bird incidents (involving 1150 estimated bird casualties); 65 reported fish incidents (involving 632,000 estimated fish casualties)

Verification and Validation of Performance Measure

Congressional Performance Measure: Reduce by 20 percent from 1995 levels the number of incidents involving mortalities to terrestrial and aquatic wildlife caused by pesticides.

Performance Database: The Ecological Incident Information System (EIIS) is a national database of information on poisoning incidents of nontarget plants and animals caused by pesticide use. This database is maintained by the Environmental Fate and Effects Division of the Office of Pesticide Programs.
Data Source: Data are extracted from written reports of fish and wildlife incidents submitted to the Agency by pesticide registrants under Federal Insecticide Fungicide and Rodenticide Act (FIFRA), Section 6(a)(2), as well as incident reports voluntarily submitted by state and federal agencies involved in investigating such incidents.

QA/QC Procedures: There is a process to ensure data quality for this measure. Before entering an incident, a database program is used to screen for records already in the database with similar locations and dates. Similar records are then individually reviewed to prevent duplicate reporting. After each record is entered into the EIIS database, an incident

report is printed that contains all the data entered into the database. A staff member, other than the one who entered the data, then reviews the information in the report and compares it to the original source report to verify data quality. Scientists using the incident database are also encouraged to report any inaccuracies they find in the database for correction.

Data Quality Reviews: Internally and externally conducted data quality reviews related to data entry are ongoing. When resources allow incorporation of wildlife data from private organizations, such as the American Bird Conservancy, the new data and EIIS data are reviewed in concert for quality during data entry.

Data Limitations: This measure is designed to monitor trends in the numbers of acute poisoning events reported to the Agency. Because the data are obtained, in part, through voluntary reporting, the numbers of reported incidents may not accurately reflect the numbers of actual incidents. Therefore, it is important to consider the possible factors influencing changes in incident reporting rates over time when evaluating this measure.

New/Improved Data or Systems: The Office of Pesticide Programs is currently conducting a project with the American Bird Conservancy, reviewing the data in its Avian Incident Monitoring System on bird kill incidents caused by pesticides. These data will be incorporated into the EIIS. The project should improve the quantity and quality of data in the EIIS database on avian incidents.

Statutory Authorities

Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)
Federal Food, Drug and Cosmetic Act (FFDCA)
Food Quality Protection Act (FQPA) of 1996
Clean Water Act

Objective 2: Reduce Risks from Lead and Other Toxic Chemicals

By 2007, significantly reduce the incidence of childhood lead poisoning and reduce risks associated with polychlorinated biphenyls (PCBs), mercury, dioxin, and other toxic chemicals of national concern.

Key Program

(Dollars in Thousands)

	FY 2001 Enacted	FY 2002 Enacted	FY 2003 Request	FY 2003 Req. v. FY 2002 Ena.
Administrative Services	$96.8	$0.0	$0.0	$0.0
Congressionally Mandated Projects	$130.7	$380.0	$0.0	($380.0)
Facilities Infrastructure and Operations	$0.0	$1,940.1	$2,076.6	$136.5
Grants to States for Lead Risk Reduction	$13,682.0	$13,682.0	$13,682.0	$0.0
Homeland Security	$0.0	$150.0	$0.0	($150.0)
Lead Risk Reduction Program	$14,214.3	$13,092.6	$13,166.3	$73.7
Legal Services	$188.8	$220.4	$238.9	$18.5
Management Services and Stewardship	$58.6	$182.9	$197.6	$14.7
National Program chemicals: PCBs, Asbestos, Fibers,and Dioxin	$6,103.8	$6,775.5	$6,994.5	$219.0

Annual Performance Goals and Measures

Lead Regulatory Standards

In 2001 EPA finalized a rule that establishes standards regarding hazardous levels of lead in paint, dust and soil.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Lead Hazard Standards Rule - develop final	1 final			Rule

Baseline:

Safe PCB Disposal

In 2003 Promote safe disposal of PCB-contaminated equipment and waste.

In 2002 Promote Safe disposal of PCB contaminated equipment anad waste.

In 2001 Capacitor, Transformer and Bulk Waste data reported by industry on a calendar year basis and not available until September 2002.

The Transfomer Reclassicifcation Rule was published on April 2, 2001.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Safe Disposal of Transformers	Avail. 9/1/02	10000	10000	Transformers
Safe Disposal of Capacitors	Avail. 9/1/02	22000	25000	Capacitors
Safe Disposal of Bulk Waste	Avail. 9/1/02	660,000,000	660,000,000	Kg Bulk Waste
Develop Final Transformer Reclassification Rule				Rule

Baseline: Baseline for Capacitors: 1.85 million units; Transformers 2.20 million units; baseline for bulk waste disposal is based on annual disposal of PCB bulk waste from 1990-1995.

Lead Certification and Training of Lead Abatement

In 2003 Reduce lead exposure in housing units and in the deleading of bridges and structures.

In 2002 Implement certification and training of lead abatement professionals.

In 2002 Prepare rules on training, accreditation and certification requirements for renovation and remodeling activities and training, accreditation and certification requirements for lead-based paint activities in buildings and superstructures.

In 2001 EPA did not finish this rule.

In 2001 More than 2,000 individuals were certified as lead abatement professionals. This number was estimated from the monthly average of incoming Certification Applications. An improved tracking mechanism is being negotiated with a contractor for future years.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Evaluate results from pilot test of indicators and modify for implementation nationwide.				Analysis
Building and Superstructure Rule		In development	1 Proposed	Rule

Certified individuals only in states with federally administered program	>2,000			Certified
Certified nationally (federally-administered and state-administered program)		4000	5000	Certified
Number of Abatements			pilot (TBD)	Notifications
Pilot Regional effort to monitor reduction in lead exposures			3	Regions
Renovation and Remodeling Rule	incomplete	in development	1 Proposed	Rule
Administer data collection grants to Tribes to determine Tribal lead exposure			15	Grants

Baseline: Baseline will be established in 2001. (Note: 2003 goal of 5000 assumed that both EPA and state certifications would be counted. We have been unable to confirm when/if we will get state data, so are now limiting this to EPA data.) Rule development was initiated in 1998; no consistent standard for abating lead paint for renovation or buildings/superstructures existed prior to Title X.

Verification and Validation of Performance Measures

Performance Measure: Number of certified individuals nationally

Performance Database: Regional Office records.

Data Source: Currently, all information is received through informal reporting from Regional offices, and originates from information submitted via certification applications. In the future, we will track certifications centrally.

QA/QC Procedures: Applicants are given photo identifications to prevent cheating at certification testing centers. EPA Headquarters reviews applications for completeness, including checking for the required information and materials. Regions review applications for quality, including a more substantive review of the application. Third-party test centers have extensive QA/QC controls under the contract.

Data Quality Review: Data quality reviews of records maintained at the test centers are conducted during routine compliance monitoring of the centers using Office of Enforcement and Compliance Assurance procedures. The reviews have found occasional discrepancies but no regional or national trends have come to light requiring systemic modifications to any record-keeping or QA/QC procedures.

Data Limitations: We have certification data from nine out of ten EPA regional offices. We expect that the remaining regional office would add no more than 300 certified entities to the baseline count. If an individual or firm was certified in more than one EPA Region, they have been double-counted. We expect that these difficulties will be resolved once we have in place a centralized database.

New/Improved Data or Systems: We hope to have a centralized, contractor-run tracking system in place by 2003.

Statutory Authorities

Toxic Substances Control Act (TSCA) section 4 , 5, 6, 8, 12(b) and 13 (15 U.S.C. 2603-5, 2607, 2611 and 2612)
Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) sections 3, 4, 5, 6, 11, 18, 24, and 25 (7 U.S.C. 136a, 136a-1, 136c, 136d, 136i, 136p, 136v, and 136w)
Asbestos Hazard Emergency Response Act (AHERA)

Objective 3: Manage New Chemical Introduction and Screen Existing Chemicals for Risk

By 2007, prevent or restrict introduction into commerce of chemicals that pose risks to workers, consumers, or the environment and continue screening and evaluating chemicals already in commerce for potential risk.

Key Program

(Dollars in Thousands)

	FY 2001 Enacted	FY 2002 Enacted	FY 2003 Request	FY 2003 Req. v. FY 2002 Ena.
Administrative Services	$233.8	$0.0	$0.0	$0.0
Community Assistance	$556.5	$474.4	$507.1	$32.7
Congressionally Mandated Projects	$486.5	$487.5	$0.0	($487.5)
Endocrine Disruptor Screening Program	$3,634.1	$2,952.8	$2,934.2	($18.6)
Environmental Monitoring and Assessment Program, EMAP	$143.0	$66.0	$0.0	($66.0)
Existing Chemical Data, Screening, Testing and Management	$24,522.4	$28,286.4	$28,331.9	$45.5
Facilities Infrastructure and Operations	$1,270.3	$5,983.8	$5,600.5	($383.3)
Homeland Security	$0.0	$1,102.2	$0.0	($1,102.2)
Legal Services	$803.3	$912.3	$979.6	$67.3
Management Services and Stewardship	$1,004.2	$824.5	$725.8	($98.7)
New Chemical Review	$12,620.2	$12,477.2	$13,123.8	$646.6
Research to Support Safe Communities	$20,093.7	$21,593.6	$25,149.6	$3,556.0
Science Coordination and Policy	$0.0	$177.1	$185.7	$8.6

Annual Performance Goals and Measures

New Chemicals and Microorganisms Review

In 2003 Of the approx. 1,800 applic. for new chem. and microorganisms submitted by industry, ensure those marketed are safe for humans and the envir. Increase proportion of commer. chem. that have undergone PMN review to signify they are properly managed and may be potential green altern. to exist. chem.

In 2002 Of the approx. 1,800 applic. for new chem. and microorganisms submitted by industry, ensure those marketed are safe for humans and the envir. Increase proportion of commer. chem. that have undergone PMN review to signify they are properly managed and may be potential green altern. to exist. chem.

In 2001 EPA reviewed 1,770 Premanufacturing Notices. By the end of 2001, 21 percent of all chemicals in commerce had been assessed for risks.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
TSCA Pre-Manufacture Notice Reviews	1770	1800	1800	Notices
Notice of Commencements	21.0	21.6%	22.3%	NOCs (Cum)

Baseline: In FY 2000, there were potentially 78,598 chemicals in commerce; 15,992 of these chemicals had gone through the TSCA Premanufacture Notice (PMN) process and entered into commerce following submittal of a Notice of Commencement of Manufacturing. These chemicals have been assessed for risks and controls are in place as necessary. A large fraction of these chemicals also may be "green" alternatives to existing chemicals in commerce.

Testing of Chemicals in Commerce for Endocrine Disruptor

In 2002 Standardization and validation of screening assays.

In 2001 The two screening assays were not completed.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Screening Assays Completed		1		Screening assay

Baseline: The non-prioritized universe of chemicals that needs to be considered for prioritization includes: pesticide active ingredients, pesticide inert ingredients, chemicals on the TSCA Inventory, environmental contaminiants, food additives, pharmaceuticals, cosmetics, nutritional supplements, and representative mixtures. "Priority-setting" refers to the determination of priorites for entry into Tier 1 Screening.

Expand Information on Toxic Substances

In 2003 Provide information and analytical tools to the public for assessing the risks posed by toxic chemicals

In 2002 Provide information and analytical tools to the public for assessing the risks posed by the release of toxic substances in communities.

In 2001 Data was obtained from test plans submitted by industry for 724 chemicals already in commerce

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Provide current national risk screening information to the public	1	1		Tools
Completion of community risk identification analyses	2	2		Analyses

Number of initialted/completed risk assessments for chemicals			4	Actions
Complete EPA-HQ risk-based priority setting exercise		3		Analyses
Number of submissions using exposure assessment methods, batabases, and models			80%	Submiss. (cum)
Number of users of exposure assessment methods, databases and models			500	User
Establish state toxics management programs			1	Pilot Programs
Complete EPA risk-based regional office priority-setting system		5		Analyses
Complete state risk-based priority setting exercises		6		Exercises
Expand use of risk screening environmental indicators tools to other countries that adminster pollutant release and transfer registries		1		Country
P2 and Risk Management Guidance Documents		2		Docs./Manual
Training Workshops		1		Workshops

Baseline: Release of national risk screening information first occurred in FY 1999. First community risk identification analyses were completed in FY 2000. First National, Regional, and State level risk-based priority setting exercises will be completed in FY 2002. First expanded use of risk screening tool by other countries will occur in FY 2002.

Risk Screening Environmental Indicators

In 2003 Reduce by 3.0% cum. hazard-based score for chronic human health calculated for releases and transfers of toxic chemicals reported to TRI from the level calculated for the preceding year, after adjusting for changes in production indices for the manufacturing, mining, and utilities sectors.

In 2003 Reduce by 4.0% cum. the risk-related score assoc. with air & water release pathways for chronic human hlth calc. for releases & transfers of toxic chem. rptd to TRI from the level calc. for the preceding year,after adjusting for chgs in production indices for the manuf,mining & utilities sectors

In 2002 Reduce by 1.5% annually, the hazard-based score for chronic human health calculated for releases and transfers of toxic chemicals reported to TRI from the level calculated for the preceding year, after adjusting for changes in production indices for the manufacturing, mining, and utilities sectors.

In 2002 Reduce by 3.0% annually the risk-related score assoc. with air & water release pathways for chronic human hlth calc. for releases & transfers of toxic chem. rptd to TRI from the level calc. for the preceding year,after adjusting for chgs in production indices for the manuf,mining & utilities sectors

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Reduction in the year 2002 production-adjusted RSEI hazard-based score of releases and transfers of toxic chemicals reported to TRI from the level calculated for 2001 (reported in 2004).		1.5%	3.0%	Index
Reduction in the year 2002 production-adjusted RSEI risk-based score of releases and transfers of toxic chemicals reported to TRI from the level calculated for 2001 (reported in 2004).		3%	4.0%	Index

Baseline: This production-adjusted APG measure is based upon the Risk Screening Environmental Indicators (RSEI) chronic human health risk-related score which is calculated by weighting estimated surrogate doses associated with TRI releases by facilities. The data for 1995 are used as the baseline for this measure.

PBT Profiler

In 2003 Provide industry with user-friendly computerized tools that allow new chemical product alternatives to be evaluated at early stages of design process.

In 2002 Provide industry with user-friendly, computerized tools that allow new chemical product alternatives to be evaluated at early stage of design process.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Number of users of the PBT Profiler		50	100	Users
Number of Chemicals Profiled		500	1000	Chemicals
Number of Companies Participating in Sustainable Futures			25	Participants
Number of Self-Audited New Chemical Product Alternatives			100	Alternatives

Baseline: In FY 2002 the Agency made powerful risk screening software (the P2 framework) broadly available to chemical industry, including providing regulatory relief as an incentive to drive chemical risk screening and P2 outcomes. In FY 2003, the Agency will audit Premanufacture submissions to determine the number of companies participating and the total number of self-audited product alternatives.

Protect from Acute Exposure to Extremely Haz. Chem

In 2003 Establish short-term exposure limits for a wide range of acutely toxic substances that are protective of general public, including children, infants, the infirmed, and the elderly through the Acute Exposure Guideline Levels (AEGL) Program

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Chemicals Addressed by AEGL Program			33	Chemicals
Number of AEGL values generated that will protect workers and general public			495	Values

Baseline: Baseline is 2002; calculation methodology by addition of AEGL values (10 minute, 30 minute, 1 hour, 4 hour, and 24 hour exposure periods) and numbers of chemicals addressed.

Research

Research on Commercial Chemicals and Microorganism

In 2003 Provide a strategic framework for developing an integrated suite of tools that will enhance OPPTS procedures for assessing the risks to human health and ecological systems associated with commercial chemicals, microorganisms, and genetically modified organisms.

In 2002 Develop improved methods and models to evaluate the impact of environmental stressors on human health and ecological endpoints for use in guidelines, risk assessments, and risk management strategies.

In 2001 EPA produced guidance on the use of structure activity relationships, as well as data on exposure of farm applicators to agricultural pesticides to improve the characterization of health risks and reduce community exposures to environmental chemical stressors.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Guidance in the use of Structure Activity Relationships (SAR) computer technologies.	1			guidance
Create searchable database from existing toxicity databases to enable researchers and risk assessors to explore structure-activity associations across toxicity endpoints of regulatory interest.		1		database
Use QSAR models and animal test methods to meet regulatory objectives associated with tiered human health and ecological risk assessments of commercial chemicals, microorganisms, and GMOs.			09/30/2003	methods

Baseline: At present, standard guidelines for test methods and risk assessment methodologies to evaluate the potential risks of environmental stressors to human health and ecological systems are limited to certain endpoints and are generally non-probabilistic in nature. Improved test methods and risk assessment tools will be developed to more accurately predict and fully characterize human health and ecological risks. Improved risk management tools will also be developed that will better identify and reduce environmental exposures to human health and ecosystems.

Verification and Validation of Performance Measures

Performance Measure: TSCA Pre-manufacture Notice Reviews

Performance Database: New Chemicals Management Information Tracking System (MITS), which tracks information from beginning of Premanufacture Notice (PMN) program (1979) to present. Information includes number of PMNs submitted and final disposition (whether regulated or not) and number of low volume and test market exemptions.

Data Source: As industry develops new chemicals, it submits data related to the new chemicals for review to the Agency, including information on chemicals to be manufactured and imported, chemical identity, manufacturing process, use, worker exposure, environmental releases and disposal.

QA/QC Procedures: Local Area Network (LAN) server contains confidential business information (CBI) support documents on each of the chemicals; data undergo quality assurance/quality control by EPA before being uploaded to the LAN. EPA always checks for consistency among similar chemicals in databases.

Data Quality Review: EPA reviews industry data; EPA staff scientists and contractors perform risk screenings and assessments which could lead to regulation.

Data Limitations: None known.

New/Improved Data or Systems: None planned.

Performance Measure: After reviewing submissions from companies, make screening quality health and environmental effects data publicly available for 2,800 HPV chemicals

Performance Database: EPA is developing an electronic chemical right-to-know database system, called the U.S. High Production Volume (US HPV) database, which will allow organized storage and retrieval of all available information on High Production Volume chemicals in commerce in the United States. The US HPV database will be designed to store in a systematic fashion, physical chemistry, fate, exposure, and toxicity data on listed chemicals for Agency and public use.

Data Source: Industry submits test plans and robust summaries of risk screening data in response to the voluntary HPV Challenge program or EPA promulgated test rules.

QA/QC Procedures: Data undergo quality assurance/quality control by EPA before being uploaded to the database. EPA reviews industry submissions of robust summaries of hazard data on individual chemicals and chemical categories, and test plans based on those summaries. EPA determines whether industry data adequately support the summaries and test plans. Data review does not include new information received as a result of new testing.

Data Quality Review: Review of industry data.

Data Limitations: Data are primarily hazard data, not exposure data. Data are suitable to support screening level assessments only.

New/Improved Data or Systems: Data will be integrated with other Toxic Substances Control Act (TSCA) databases into an Oracle environment.

Statutory Authorities

Toxic Substances Control Act (TSCA) section 4 , 5, 6, 8, 12(b) and 13 (15 U.S.C. 2603-5, 2607, 2611 and 2612)
Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) sections 3, 4, 5, 6, 11, 18, 24, and 25 (7 U.S.C. 136a, 136a-1, 136c, 136d, 136i, 136p, 136v, and 136w)
Federal Food, Drug, and Cosmetic Act (FFDCA)

Research

Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)
Toxic Substances Control Act (TSCA)
Federal Food, Drug, and Cosmetic Act (FFDCA)

Objective 4: Ensure Healthier Indoor Air

By 2005, 16 million more Americans than in 1994 will live or work in homes, schools, or office buildings with healthier indoor air.

Key Program

(Dollars in Thousands)

	FY 2001 Enacted	FY 2002 Enacted	FY 2003 Request	FY 2003 Req. v. FY 2002 Ena.
Administrative Services	$88.8	$0.0	$0.0	$0.0
Air,State,Local and Tribal Assistance Grants: Other Air Grants	$8,139.9	$8,139.9	$8,139.9	$0.0
Children's Indoor Environments	$14,714.1	$13,287.9	$13,918.4	$630.5
Facilities Infrastructure and Operations	$0.0	$1,799.7	$1,846.2	$46.5
Indoor Environments	$9,241.9	$9,366.2	$9,307.6	($58.6)
Legal Services	$85.8	$92.8	$103.5	$10.7
Management Services and Stewardship	$141.0	$526.6	$513.2	($13.4)
Radon	$6,222.7	$6,453.0	$6,493.9	$40.9
Regional Management	$0.0	$4.0	$0.0	($4.0)

Annual Performance Goals and Measures

Healthier Residential Indoor Air

In 2003 834,400 additional people will be living in healthier residential indoor environments.

In 2002 834,400 additional people will be living in healthier residential indoor environments.

In 2001 An additional 890,000 additional people are living in healthier residential indoor environments.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
People Living in Healthier Indoor Air	890,000	834,400	834,400	People

Baseline: 1. By 2003, increase the number of people living in homes built with radon resistant features to 3,635,000 from 600,000 in 1994. (cumulative) 2. By 2003, decrease the number of children exposed to ETS from 19,500,000 in 1994 to 16,889,000. (cumulative) 3. By 2003, increase the number of people living in radon-mitigated homes to 1,625,700 from 780,000 from 1994. (cumulative) 4. By 2003, increase by 122,400 the number of people with asthma and their caregivers who are educated about indoor air asthma triggers.

Healthier Indoor Air in Schools

In 2003 1,050,000 students, faculty and staff will experience improved indoor air quality in their schools.

In 2002 1,228,500 students, faculty and staff will experience improved indoor air quality in their schools.

In 2001 An additional 1,930,000 students, faculty and staff are experiencing improved indoor air quality in their schools.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Students/Staff Experiencing Improved IAQ in Schools	1,930,000	1,228,500	1,050,000	Students/Staff

Baseline: The nation has approximately 110,000 schools with an average of 525 students, faculty and staff occupying them for a total baseline population of 58,000,000. The IAQ "Tools for Schools" Guidance implementation began in 1997. For FY 2003, the program projects an additional 2,000 schools will implement the guidance and seeks to obtain implementation commitments from 5 of the 50 largest school districts in the U.S. with an average of 140,000 per district. (Additional, not cumulative since there is not an established baseline for good IAQ practices in schools.)

Verification and Validation of Performance Measures

Performance Measure: People Living in Radon Resistant Homes

Performance Database: Survey

Data Source: The survey is an annual sample of members of the National Association of Home Builders (NAHB), the number of homes they built, and the percent that were built radon resistant. NAHB members construct 95% of the homes built in the U.S. each year. Using a model reviewed by EPA, NAHB estimates the percentage of these homes that are built radon resistant. The percentage built radon resistant from the sample is then used to estimate what percent of all homes built nationwide are radon resistant**.** To calculate the number of people living in radon resistant homes, EPA assumes an average of 2.67 people per household.

QA/QC Procedures: Because data are obtained from an external organization, QA/QC procedures are not known.

Data Quality Review: N/A

Data Limitations: Because the survey sample does not include builders who are non-members of NAHB, the resulting estimate may underestimate the total number of homes built radon resistant.

New/Improved Data or Systems: None

Performance Measure: People Living in Radon Mitigated Homes

Performance Database: External

Data Source: Radon fan manufacturers report fan sales to the Agency. EPA assumes one fan per radon mitigated home and then multiplies it by the assumed average of 2.67 people per household.

QA/QC Procedures: Because data are obtained from an external organization, QA/QC procedures are not known.

Data Quality Review: N/A

Data Limitations: Reporting by radon fan manufacturers is voluntary and may underestimate the number of radon fans sold. Nevertheless, these are the best available data to determine the number of homes mitigated. There are other methods to mitigate radon including: passive mitigation techniques of sealing holes and cracks in floors and foundation walls, installing sealed covers over sump pits, installing one-way drain valves in untrapped drains, and installing static venting and ground covers in areas like crawl spaces. Because there are no data on the occurrence of these methods, again there is the possibility that the number of radon mitigated homes has been underestimated.

New/Improved Data or Systems: None

Performance Measure: Children Under 6 not Exposed to Environmental Tobacco Smoke (ETS) in the Home

Performance Database: National telephone survey of a representative sample of almost 31,000 homes.

Data Source: EPA

QA/QC Procedures: Survey is designed, conducted, and analyzed in accordance with approved Agency procedures.

Data Quality Review: N/A

Data Limitations: Random digit dialing methodology is used to ensure that a representative sample of households has been contacted; however, survey is subject to inherent limitations of voluntary telephone surveys of representative samples. Limitations of phone surveys include: 1) inconsistency of interviewers following survey directions. For example, an interviewer might ask the questions incorrectly or inadvertently lead the interviewee to a response; 2) calling at an inconvenient time. For example, the respondent might not want to be interrupted at the time of the call and may resent the intrusion of the phone call. The answers will reflect this attitude.

New/Improved Data or Systems: None

Performance Measure: Students/Staff Experiencing Improved Indoor Air Quality (IAQ) in Schools

Performance Database: Survey of representative sample of schools using commercially available and government databases of private and public schools. The survey will help determine the number of schools adopting and implementing good IAQ practices by using EPA's "Tools for Schools" kit (TfS). The survey is expected to be conducted in 2002 and results are expected in later in the year.

Data Source: EPA-developed questionnaire

QA/QC Procedures: Survey is designed, conducted, and analyzed in accordance with approved Agency procedures.

Data Quality Review: EPA will review the data for completeness and quality of responses.

Data Limitations: Subject to inherent limitations of voluntary telephone surveys of representative samples.
New/Improved Data or Systems: Prior to the survey, EPA simply tracked the number of schools receiving the kit and estimated the population of the school to determine the number of students/staff experiencing improved indoor air quality. With this new survey, EPA is compiling a database to better track the number of schools that have received TfS kits as well as have adopted and implemented good IAQ practices. The database will be complete in late 2002.

Statutory Authorities

Radon Gas and Indoor Air Quality Research Act of Title IV of the Superfund Amendments and Re-authorization Act (SARA) of 1986
Toxic Substances Control Act (TSCA), section 6, Titles II, and Title III (15 U.S.C. 2605 and 2641-2671)
Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)
Clean Air Act (CAA)
Safe Drinking Water Act (SDWA)

Objective 5: Facilitate Prevention, Reduction and Recycling of PBTs and Toxic Chemicals

By 2005, facilitate the prevention, reduction, and recycling of toxic chemicals and municipal solid wastes, including PBTs. In particular, reduce by 20 percent the actual (from 1992 levels) and by 30 percent the production-adjusted (from 1998 levels) quantity of Toxic Release Inventory (TRI)-reported toxic pollutants which are released, disposed of, treated, or combusted for energy recovery, half through source reduction.

Key Program

(Dollars in Thousands)

	FY 2001 Enacted	FY 2002 Enacted	FY 2003 Request	FY 2003 Req. v. FY 2002 Ena.
Administrative Services	$96.7	$0.0	$0.0	$0.0
Congressionally Mandated Projects	$7,283.7	$1,700.0	$0.0	($1,700.0)
Design for the Environment	$4,965.6	$4,707.6	$4,810.7	$103.1
Facilities Infrastructure and Operations	$0.0	$2,725.9	$2,779.1	$53.2
Legal Services	$23.1	$70.2	$197.8	$127.6
Management Services and Stewardship	$77.4	$478.6	$493.4	$14.8
New Chemical Review	$1,604.3	$1,611.6	$1,606.4	($5.2)
PBTI	$2,455.1	$2,572.5	$2,580.5	$8.0
Pollution Prevention Incentive Grants to States	$5,986.3	$5,986.3	$5,986.3	$0.0
Pollution Prevention Program	$10,066.4	$9,597.8	$9,902.8	$305.0
RCRA State Grants	$3,066.2	$4,007.6	$4,007.6	$0.0
RCRA Waste Reduction	$11,689.0	$15,288.0	$13,740.7	($893.0)
Regional Management	$8.8	$9.3	$10.6	$1.3

Annual Performance Goals and Measures

Green Chemistry Challenge Awards

In 2003 Continue to stimulate development of new safe ("green") chemicals and safe chemical processes through public recognition for outstanding achievements in this field.

In 2002 Continue to stimulate development of new safe ("green") chemicals and safe chemical processes through public recognition for outstanding achievements in this field.

In 2001 The program received information on a total of 75 processes/products.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Alternative feed stocks, processes, or safer products identified through Green Chemistry Challenge Award	75	110	160	Prod/proc (cum)

Baseline: Baseline is zero in FY 2000.

Toxic Release Inventory (TRI) Pollutants Released

In 2003 The quantity of Toxic Release Inventory (TRI) pollutants released, disposed of, treated or combusted for energy recovery in 2003, (normalized for changes in industrial production) will be reduced by 200 million pounds, or 2%, from 2002. This data will be reported in 2005.

In 2002 The quantity of Toxic Release Inventory (TRI) pollutants released, disposed of, treated or combusted for energy recovery in 2002, (normalized for changes in industrial production) will be reduced by 200 million pounds, or 2%, from 2001. This data will be reported in 2004.

In 2001 No conclusions can be drawn regarding changes in TRI Non-recycled wastes from calendar year 2000 to calendar year 2001 without data.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Reduction of TRI non-recycled waste (normalized)	not available	200 Million	200 Million	lbs

Baseline: This APG measures changes in TRI Non-Recycled Wastes. TRI data are reported to EPA by facilities by July 02, and compiled and reported publically by EPA in Spring 03. EPA will do an analysis to determine a new target.

Managing PBT Chemicals

In 2003 Initiate further actions pursuant to PBT Strategy and Level I PBT National Action Plans including a plan to address unique environmental health threats to Tribes and special populations.

In 2002 Initiate further actions pursuant to PBT Strategy and Level I PBT National Action Plans including a plan to address unique environmental health threats to Tribes and special populations.

In 2001 15 new PBT prevention / reduction projects initiated through regional offices in 2001. The list of additional priority PBTs was not published.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Number of prevention and reduction Regional projects initiated.	25	35	45	Grants (Cum)
Publish final list of additional priority PBTs.	0			List
Hospital Mercury Project		200	100	Participants
Number of New Multiple-PBT Strategies Completed		2		Strategies
Tribal PBT Actions			4	Grants

Baseline: Level II chemicals: For PBT risk reduction projects, the baseline is zero projects in FY 1999. Final List of Priority PBTs: The baseline for hospital mercury project is under development. The baseline for number of new multiple-PBT strategies completed is zero in 2001.

Safer Alternative Cleaning Technologies

In 2003 Expand the use of cleaner technologies in priority industries, including reduction in the use of perchloroethylene from 1997 levels.

In 2002 Expand P2 practices in the garment care industries by achieving a reduction in the use of perchloroethylene by the dry-cleaning industry from the 1997 levels.

In 2002 Expand the use of cleaner technologies in priority industries.

In 2001 EPA continued to work with industry on reducing the use of the highly toxic chemical perchloroethylene in the dry cleaning industry.

In 2001 The market share for cleaner inks is 6 percent. The market share for cleaner adhesives increased to 65%. In FY2001, EPA established partnerships with 8 detergent formulation industry entities, including 15 formulations.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
For inks, track size of flexographic ink industry and market share ($ and lbs) of cleaner inks.	6%	15% (cum)	15% (cum)	Market share
For adhesives, track size of cleaner adhesive industry market share.	65%	70% (cum)	70% (cum)	Market Share
For eco-friendly detergents, track the number of laundry detergent formulator industry partners.	18	12	12	Partners (cum)
Perchloroethylene reduction	not available	38%	40%	Use Reduct cum
Regional project to expand the use of cleaner technologies		15	20%	Projects (cum)

Baseline: In 1997, 83 million pounds perchloroethylene (perc) used; in 1998, 72 million pounds of perc used; in 1999, 63 million pounds of perc used.

Eco-friendly detergents baseline is 1997: 0 partners and 0 detergents. The adhesives baseline is 1997 which reflects the beginning of tracking market share -- the measure is the increase in market share from the baseline. Baseline for flexographic inks measure is 1998 which reflects the beginning of tracking market share.

Reducing PBTs in Hazardous Waste Streams

In 2003 Reduce waste minimization priority list chemicals in hazardous waste streams by 43% to 86 million pounds by expanding the use of state and industry partnerships and Regional pilots

In 2002 Reduce waste minimization priority list chemicals in hazardous waste streams by 40% to 91 million pounds by expanding the use of state and industry partnerships and Regional pilots.

In 2001 A draft trends report that shows changes from 1991 to 2000 was prepared in FY 2001 and is currently undergoing intergovernmental review.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Prepare a trends report that shows Toxic Release Inventory changes from 1991 to 1998.	1			report
Reduction in generation of priority list chemicals from 1991 levels.		40	43	percent

Baseline: 1991 Toxic Release Inventory data will be used to determine reductions.

Municipal Solid Waste Source Reduction

In 2003 Divert an additional 1% (for a cumulative total of 32% or 74 million tons) of municipal solid waste from land filling and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.5 pounds per day.

In 2002 Divert an additional 1% (for a cumulative total of 31% or 69 million tons) of municipal solid waste from land filling and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.5 pounds per day.

In 2001 FY 2001 data is not available for the diversion of municipal solid waste from land filling and combustion or maintaining per capita generation of RCRA municipal solid waste. Analysis of FY 2001 data is anticipated by September 2003.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Millions of tons of municipal solid waste diverted.	not available	69	74	million tons
Daily per capita generation of municipal solid waste.	not available	4.5	4.5	lbs. MSW

Baseline: 1990 levels established at 17% of MSW diverted and 4.3 pounds MSW per capita daily generation.

Verification and Validation of Performance Measures

Performance Measure: The quantity of Toxic Release Inventory (TRI) pollutants released, disposed of, treated

or combusted for energy recovery in 2003, (normalized for changes in industrial production) will be reduced by 200 million pounds, or 2%, from 2002. This data will be reported in 2005.

Performance Database: TRIM: Toxics Release Inventory Modernization, formerly **TRIS** (Toxics Release Inventory System) - contains aggregate data on source reduction by individual reporting facilities. The aggregate data are used to provide a measure of national performance.

Data Source: Regulated facilities report facility-specific, chemical-specific release reports and recycling data to EPA. For example, in calendar year 1999, 22,639 facilities filed 84,068 TRI reports.

QA/QC Procedures: Most facilities use EPA certified automated Toxics Release Inventory (TRI) FORM R reporting tools, which contains automated error checking mechanisms. Upon receipt of facility reports, EPA conducts automated edits, error checks, data scrubs, corrections and normalization during data entry and subsequent processing to verify that the information provided by the facilities is correctly entered in TRIM. The Agency does not control the quality of the data submitted by the regulated community. EPA does, however, work with the regulated community to improve the quality of their estimates.

Data Quality Review: The quality of the data contained in the TRI chemical reports is dependent upon the quality of the data that the reporting facility uses to estimate its releases and other waste management quantities. GAO Report, Environmental Protection: EPA Should Strengthen Its Efforts to Measure and Encourage Pollution Prevention (GAO - 01 - 283), recommends that EPA improve its rule on reporting of toxic releases to improve reporting on source reduction activities. Although EPA agrees that source reduction data is valuable, the Agency has not finalized regulations to improve reporting of source reduction activities by TRI-regulated facilities.

Data Limitations: Use of the data should be based on the user's understanding that the Agency does not have direct assurance of the accuracy of the facilities' measurement and reporting processes. TRI release data are reported by facilities on a good faith, best estimate basis. EPA does not have the resources to conduct on-site validation of each facility's reporting data, though on-site investigations do occur each year at a subset of reporting facilities.

New/Improved Data or Systems: EPA plans to develop regulations for improving reporting of source reduction activities by TRI reporting facilities.

Performance Measure: Millions of tons of municipal solid waste diverted; Daily per capita municipal solid waste generation.

Performance Database: Data is provided by the Department of Commerce. EPA does not maintain a database for this information.

Data Source: The baseline numbers for municipal solid waste source reduction and recycling are developed using a materials flow methodology employing data largely from the Department of Commerce and described in the EPA report titled "Characterization of Municipal Solid Waste in the United States." The Department of Commerce collects solid waste generation and recycling rate data from various industries.

QA/QC Procedures: Quality assurance and quality control are provided by the Department of Commerce's internal procedures and systems. The report prepared by the Agency is then reviewed by a number of experts for accuracy and soundness.

Data Quality Review: The report, including the baseline numbers and annual rates of recycling and per capita municipal solid waste generation, is widely accepted among experts. There are various assumptions factored into the analysis to develop progress on each measure.

Data Limitations: Non-hazardous waste data limitations stem from the fact that the baseline statistics and annual rates of recycling and per capita municipal solid waste generation are based on a series of models, assumptions, and extrapolations and, as such, are not an empirical accounting of municipal solid waste generated or recycled.

New/Improved Data or Systems: Because these numbers are widely reported and accepted by experts, no new efforts to improve the data or the methodology have been identified or are necessary.

Statutory Authorities

Toxic Substances Control Act (TSCA) sections 4 and 6 and TSCA Titles II, III, and IV (15 U.S.C. 2605 and 2641-2692)
Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) sections 3, 4, 5, 6, 11, 18, 24, and 25 (7 U.S.C. 136a, 136a-1, 136c, 136d, 136i, 136p, 136v, and 136w)
Pollution Prevention Act (PPA) (42 U.S.C. 13101-13109)
Clean Air Act (CAA) section 309 (42 U.S.C. 7609)
Clean Water Act (33 U.S.C. 1251-1387)
Emergency Planning and Community Right-to-Know Act (EPCRA) (42 U.S.C. 11001-11050)
Resource Conservation and Recovery Act (RCRA) (42 U.S.C. 6901-6992k) Solid Waste Disposal Act as amended by the Hazardous Waste Amendments of 1984

Objective 6: Assess Conditions in Indian Country

By 2005, EPA will assist all federally recognized tribes in assessing the condition of their environment, help in building the tribes' capacity to implement environmental management programs, and ensure that EPA is implementing programs in Indian country where needed to address environmental issues.

Key Program

(Dollars in Thousands)

	FY 2001 Enacted	FY 2002 Enacted	FY 2003 Request	FY 2003 Req. v. FY 2002 Ena.
Administrative Services	$47.4	$0.0	$0.0	$0.0
American Indian Environmental Office	$10,014.8	$9,911.6	$10,219.7	$308.1
Facilities Infrastructure and Operations	$0.0	$1,165.4	$1,250.3	$84.9
Legal Services	$1,370.1	$1,383.0	$1,428.7	$45.7
Management Services and Stewardship	$401.8	$426.9	$475.5	$48.6
Regional Management	$53.9	$80.0	$65.5	($14.5)
Tribal General Assistance Grants	$52,469.7	$52,469.7	$57,469.7	$5,000.0

Annual Performance Goals and Measures

Tribal Environmental Baseline/Environmental Priori

In 2003 In 2003, AIEO will evaluate non-Federal sources of environmental data pertaining to conditions in Indian Country to enrich the Tribal Baseline Assessment Project.

In 2002 Baseline environmental information will be collected for 38% of Tribes (covering 50% of Indian Country).

In 2001 Baseline environmental assessments were collected for 207 Tribes.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Environmental assessments for Tribes. (cumulative)	207	286		Tribes, etc.
Non-federal sources of environmental data pertaining to conditions in Indian Country.			20	Data sources

Baseline: There are 572 tribal entities that are eligible for GAP program funding. These entities are the ones for which environmental assessments of their lands will be conducted.

Verification and Validation of Performance Measures

Performance Measure: Non-federal sources of environment data pertaining to conditions in Indian Country

Performance Database: The American Indian Environmental Office (AIEO) Tribal Information Management System (TIMS) is used to access Baseline Assessment Project environmental information on federally recognized Indian Tribes. TIMS draws together environmental information on Tribes from existing EPA databases, such as those from media program offices, EPA Regions, as well as databases from other federal agencies. The data is accessible and can be queried by Tribe, by state, by EPA Region, or nationally. Information can be displayed in several manners including graphically on an electronic map of tribal reservation boundaries. TIMS also contains a narrative profile description by Tribe of environmental information and management activities.

Data Source. Current TIMS' data sources are existing federal databases, both from EPA and other agencies, supplemented by data sources collected from the EPA regions as appropriate. All data sources are identified and referenced in the TIMS application. In FY 2003, AIEO will analyze data from 20 non-federal data sources for enrichment the Tribal Baseline Assessment Project. Those data sources found to have an enrichment benefit by supplementing, complementing, or adding value to the federal data sources will be integrated into TIMS.

QA/QC Procedures. Quality of the external databases will be described but not ranked. A Quality Management Plan is projected for development as agency-wide guidance is developed.

Data Quality Reviews. Tribes will have the opportunity to review and comment upon their Tribal Profile. Mechanisms for adjusting data will be supplied.

Data Limitations. Data limitations appearing in the Tribal profiles is subject to the underlying existing database systems referenced.

Statutory Authorities

Indian Environmental General Assistance Program (GAP) Act of 1992 as amended (42 U.S.C. 4368b)